

ATTORNEY DOCKET NO. 5361-1

IN THE CLAIMS:

This Listing of Claims replaces all prior Listings and versions of claims in the above-identified application.

Listing of Claims:

1-2. (Cancelled)

3. (Previously Presented) An isolated DNA molecule comprising a nucleotide sequence of SEQ ID NO:3.

4-5. (Cancelled)

6. (Previously Presented) A DNA construct comprising a nucleotide sequence of SEQ ID NO:3 operatively linked to expression control sequences.

7-21. (Cancelled)

22. (Previously Presented) A transgenic host cell comprising DNA encoding a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4, said DNA being operatively linked to expression control sequences.

23. (Original) The transgenic host cell of Claim 22 wherein the DNA comprises the nucleotide sequence of SEQ ID NO:3.

24. (Currently Amended) The transgenic host cell of any one of Claims 21, 22 or 23 which is a plant cell.

25-36. (Cancelled)

37. (Currently Amended) A transgenic plant or part of a-said transgenic plant comprising one or more cells comprising DNA encoding a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4.

38. (Previously Presented) The transgenic plant or plant part of Claim 37 wherein the DNA comprises the nucleotide sequence of SEQ ID NO:3.

39-43. (Cancelled)

44. (Currently Amended) A method of controlling weeds in a field containing a transgenic plant according to any one of Claims 36, 37, 38 or 7362, comprising applying an amount of dicamba to the field effective to control the weeds in the field.

ATTORNEY DOCKET NO. 5361-1

45-46. (Cancelled)

47. (Currently Amended) A method of selecting transformed plant cells comprising:

providing a population of plant cells;

transforming at least some of the plant cells in the population of plant cells with the DNA construct according to any one of Claims 5, 6, 56 or 57; and

selecting the transformed plant cells by culturing the resulting population of plant cells in a culture medium containing dicamba at a concentration selected so that transformed plant cells proliferate and untransformed plant cells do not proliferate.

48. (Currently Amended) A method of selecting transformed plants comprising:

providing a population of plants which comprises one or more plants comprising the DNA construct according to any one of Claims 5, 6, 56 or 57; and

selecting transformed plants by applying an amount of dicamba to the population of plants selected so that transformed plants grow, and growth of untransformed plants is inhibited.

49-52. (Cancelled)

53. (Previously Presented) An isolated DNA molecule comprising a DNA sequence encoding a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4.

54-56. (Cancelled)

57. (Previously Presented) A DNA construct comprising a DNA sequence encoding a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4.

58-71. (Cancelled)

72. (Previously Presented) The DNA construct of Claim 6 which is a vector.

73. (Previously Presented) The transgenic plant or plant part of Claim 37 wherein the plant is a broadleaf plant which is tolerant to dicamba as a result of the expression of the dicamba-degrading oxygenase and the plant part is a part of a broadleaf plant which is tolerant to dicamba as a result of the expression of the dicamba-degrading oxygenase.